Calorimetry and Global Event Characterization in PHENIX

Sebastian White for the PHENIX Collaboration

Brookhaven National Laboratory, USA

Presented by: Sebastian White

Abstract

The PHENIX detector measures transverse-energy production at mid-rapidity employing a large, fine-grained electromagnetic calorimeter (EMC) covering ± 0.35 units in η . Zero-degree calorimeters (ZDC), measuring the beam-fragmentation neutron multiplicity, and beam-beam counters(BBC) are used for triggering and event characterization. These measurements are used to study properties of RHIC collisions ranging from peripheral, photonuclear to the most central events. Et production per participant pair is compared to data from previous experiments. Timing and energy resolutions are compared with expectations from test-beam measurements. In this presentation, the performance of the calorimeters and BBC's during the year 2000 run will be discussed.